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EXAMINER	
PADGETT, MARIANNE L	

ART UNIT	PAPER NUMBER
1762	

NOTIFICATION DATE	DELIVERY MODE
10/03/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/729,184

Applicant(s)

LEFEVRE ET AL.

Examiner

Marianne L. Padgett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,17-22 and 24-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,17-22 and 24-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/24/2007 has been entered.

While previous 112 problems have been corrected, many new problems have been introduced.

It is noted that copending application 10/729,305 has now been abandoned, hence the obviousness double patenting rejection of section 7 of the action mailed 8/28/2006 is removed. However, it is noted that, as any patent attorney should know, the criteria are for (provisional) obviousness double patenting rejections **with respect to date**, is **not** that the application or patent be prior art, but that they are **copending** or were **filed within a year of each other**, when the applications/patents have same or overlapping inventors, or are to the same assignee.

In section B of the remarks in the response of 7/24/2007, applicants have cited paragraph numbers [0088] & [0034] in "originally-filed application", however as there **are no paragraph numbers** in the originally filed application, this is not a meaningful citation of support, which should have been made by citing page & line numbers, as was done in the amendment to the specification, thus to correct the record, the citations appear to correspond to paragraphs starting on page 9, line 28 & page 4, line 10. It would appear that applicants cited paragraph numbers in the PGPub; this is inappropriate as the PG Pub is **not** part of the application file.

Since there **are original teachings** on pages 1, 5 & 9, which associated texturing & embossing, where embossing made no sense in context, and which as explained by applicants (page 13 this & previous response) was a mistranslation, changing all the teachings associated with embossing to texturing is approved as just adequately supported, considering that "texturing" or "texture" are the only teachings from the original specification available to use for the corrections, but marginal as support since

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embossing is a subset of techniques available for the more general texturing, thus would change the scope, except that the original phrasing did not make sense with respect to a laser, so did not clearly define the scope.

2. While arguments might be made that the newly submitted claims 28-31 are directed to an invention that is independent or distinct from the invention originally claimed, since the process of injection molding reflectors (not even necessarily related to motor vehicles) is most closely related to previously nonelected claim 23 (now canceled), where molding is differentiated from the processes of the already examined method claims, which were/are directed to forming i.e. such as coating, a masking or reflective layer on a substrate (component), or directed to coating a component. However, these new claims are also directed to exposing & coating steps as present in the previously examined claims, where the injection molding of a substrate can be considered the means in which the component (now mask) of previously examined claim 17 is provided, thus providing a relationship to the previously examined invention. For this reason these claims will be considered sufficiently related to the elected claims, and will be examined.

3. The amendment filed 7/24/2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The paragraph (sentence) on page 1, lines 29-31, changes the original language of "embosses", which was amended 6/6/2006 to read "granulations" to a newly introduced & unsupported term of "grainings", hence introduces **New Matter** into the specification. Applicants assert that "embossed" & related forms of the word were mistranslated from the French word "grainage", however having made a translational error, which was submitted in a US patent application, thus presumed to be a correct translation, does not give applicants the right to change such errors after original submission, unless the

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support to do so is in the **original specification as filed**. Therefore, this amendment is also considered New Matter.

4. Claims 1-6, 21-27 & 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, while it is now clearly claimed that the alternatives of a mask or reflector are **made of** "a predetermined material", what is not clear is whether that predetermined material is deposited onto the component to create the mask or reflector, as implied by "forming...on", or if something is done to form them in the predetermined material, that is already on or part of the component, as could be implied by "forming...in...material on said component". As several different contradictory interpretations are possible, these claims are ambiguous, and of uncertain scope.

As a matter of scope, note as claimed that the mask or reflector is complete with this "forming..." limitation, thus already capable of acting as a mask or reflector, which makes the examiner wonder, as the mask or reflector has **already been created**, why do steps done to the "mask" or "reflector" in the dependent claims, sound like they are actually intended to be **making** a mask or a reflector? For instance, as claimed, if the forming step is before the exposing step, the plastic material of claim 3 must be entirely capable of performing masking or reflective functions, before the laser treatment, if one reads "said surface" as having antecedent basis, to the "at least one surface of **said component**" of the independent claim, as required by the limitation further defining "said step of exposure", except that claim 3's requirement of "texturing said surface of **plastic material**" (emphasis added) is not the same thing as a "surface of said component" of which the predetermined material = plastic material is only "on". (If applicants find this explanation confusing, that very much describes the limitations relationships). The claim sequences of 1+3, or 1+3+4, would appear to only make sense if the "forming..." step actually takes place after the exposing step (& metallization step), where the plastic material was somehow attached to

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the component before the exposing step, but not yet a mask or reflector, however it would not be clear what is being done in order to be "forming a mask or reflector", which is different from the metallization & texturing procedures. Note such considerations must be considered especially important to claims 2 or 5, since "further comprising" metallization or metallizing can be considered to mean that these steps are necessarily different than any steps of the independent claim, thus implied not to be part of the "forming..." step. In claim 22, it would appear that the forming step, if it's a reflector, must come first for one to be using the laser radiation to create less reflection, but then the matt zone effect appears to have no consequences/relevance for either creating or using a mask *per se*. While the lack of temporal limitations defining the order of the "forming..." & "exposing..." steps of the independent claim, may be considered to merely create broad possibilities in claim 1, not lack of clarity, when considered with steps of dependent claims 2-5, 22 & 24-27, the lack of a clearly defined order of performing a forming & exposing steps, creates considerable uncertainty as to what is necessarily actually being claimed.

The claims 24-26, which appear to be further directed towards defining the "forming..." step of claim 1, appear to be contradictory of the requirements of the independent claim, since they appear to be starting from scratch to create a shape for the mask or reflector, not modifying an already present **component**, as they claim forming various shapes in a way that does not appear to include the "component", but the independent claim already requires "said component" to exist & the "forming..." step of the independent claim is merely somehow modifying that component to create the "mask" or "reflector". In claim 26, it is unclear whether "the reflector with a substantially elliptical inner face" is intended to be reflective of itself, or if the "metallizing the interface to provide at least partially reflective surface" is what makes it a reflector. The examiner suspects the latter is intended, but clarity is needed.

Use of relative terms that lack clear metes and bounds in the claims, or in a clear definition provided in the original specification, or in relevant cited prior art, is vague and indefinite. Independent claim 17, has been amended to use the term "reducing", which is an undefined relative term, since there is

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no indication in the claim language of what is the original amount of "parasitic light rays", hence no way to determine if there has been any reduction thereof. Furthermore, the preamble having the phrase including this relative terminology, is not commensurate in scope with the body of the claim, since nothing in the preamble is directly related to any step in the body of the claim, nor is there any indication of any feature in the process that produces the claimed "reducing...".

Also in claim 17, since the amended step of "providing a mask..." in essence requires what is provided to be an already functional mask for a motor vehicle headlamp, it would appear **as claimed** that the exposing step can only be providing some optical function not related to the masking function, or is merely modifying/improving an already functional mask. Is this what is actually intended? Note that given independent claim 17's requirements, none of dependent claims 19-21 steps of metallizing & ablating the metallization can be directed to creating any of the masking functions, as such would contradict the independent claim, which requires a functional mask to already have been provided, i.e. **as written**, these dependent claims cannot be to creating a mask, only to modifying an already created mask.

In claim 29, the requirement that "the injection molding step comprises injection molding a reflector" effectively requires that the surface of the transparent thermoplastic material be reflective in order to be a reflector as required, hence this claim contradicts independent claim 28, which requires that applying the metal layer to the injection molded shape renders the surface reflective, therefore it is cannot be a reflector until after the metal layer is applied, i.e. the injection molding of the independent claim is incapable of performing claim 29 as written, or it contradicts requirements of the independent claim.

While the phrase "dipped/full beam headlamp" is used in the specification to describe figure 4, ref.#40, what is meant by this strange term is not explain, however the examiner would not be surprised if it is the result of a literal translation. While the examiner **might** reasonably **guess** the meaning of "full beam" is used for what in American English with respect to vehicle headlamps is called "high beams", she is quite sure she has never heard of anything called "dipped beam" with respect headlamps. Was the

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concept applicants were looking for what is called "low beams" in American English? Since it's **not** in the original specification, changing to this terms is not recommended unless prior art support can be shown, however clarification of the record is desirable.

Considering the translation problems already discussed with respect to the original specification, and applicants' arguments concerning the "mask", the examiner wonders if the claimed "mask" is also the result of a literal translation of some French term? While she's not an auto mechanic, to the best of her knowledge there is NO part of the headlight that is standardly called a "mask", and the only such use she found associated with headlights or the like in the patent literature were references by the present assignee and one other recent publication which was also translated from French (Foottit, PN 6,435,696 B1; col. 2, lines 22-45), but appears to be employing the term "mask" for its descriptive function, not as the name of the part. As there is no definition of "mask" in the specification, a mask is taken to incompetents its normal meaning, i.e. any object that has an effect of masking something or preventing whatever is behind it from experiencing some kind of exposure.

5. Claims 28-29 & & 31 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for making reflectors for motor vehicle lights, does not reasonably provide enablement for reflectors to be employed for all purposes, inclusive of lasers, mirrors, etc. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

Review of the specification finds that all disclosures are specifically directed to use of reflectors in motor vehicle lights systems. See page 1, the summary beginning on page 2, the drawings with brief descriptions on page 6, where Detailed Description also starts, etc., such that no disclosure was found that was generic to all reflectors, or even directed to any reflectors not used on motor vehicle light devices. Therefore, new claims 28-29 & 31, appear to be directed to claims broader than the scope of the enabling disclosure.

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6. Claims 1-6, 17-22, 24-29 & 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For reasons as discussed above, the claim 28 sequence of new claims (excepting 30) contains new matter, as it contains scope outside of the original disclosure.

The applicants made sweeping references to support in the first sentence of page 11 of their response, stating support "is found throughout the specification as originally filed, including for example at pages 6-11 and the referenced figures", which didn't actually point out any specific locations for any new limitations or new concepts added to the claims by the amendment, although starting on page 15 of the response applicants appear to be improperly using nonexistent paragraph #'s to cite support.

With respect to the preamble limitation of claim 17, "reducing parasitic light rays in motor vehicle headlamps...emit...light beam", page 5, lines 15-22+, discusses making reflectors where certain surfaces are made not reflective (modified texture) in order to eliminate parasitic reflections, i.e. in the context of modifying the surface so parasitic reflections do not occur, thus is compared to an unmodified surface, and does not adequately support the "reducing..." limitation **as claimed**, although a case could be made that for the option where one is modifying the texture of the already metallized part, that the possibility of the reflector causing parasitic reflections was present, so has been reduced, but one has to use the reflector first and caused parasitic reflections, before one can actually be "reducing" them *per se*. But for the case of modifying the plastic, then metallizing, if done as directed, the reflector would never have had any ability to cause parasitic reflections, thus it's cannot be **reduced** in that reflector. Similarly, disclosures on page 10, lines 3-10, are directed to open **avoiding or suppressing the possibility of** parasitic reflections ever occurring, hence do not cause parasitic reflections that are occurring to be

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reduced as phrased in the claim. These may be subtle distinctions, but they are probably important to applicants' intended meaning.

With respect to the amendments to claim 1, particularly in relationship to the claimed "predetermined material", such as it being plastic, the full scope of possibilities of the meanings as written in these amended claims does not appear to find complete support in the original specification, which is necessary for the claims not to encompass **New Matter**. For instance, substrates made of plastic by molding, where the substrates are to be used for components for headlights, such as masks or reflectors, where they maybe metallized before or after laser exposure are found in variations throughout the specification, such as page 3; page 4, 6th paragraph; page 5, 2nd paragraph etc., but adding predetermined/plastic material on to a component or taking and already existent component & then shaping it to form a mask or a reflector, was not found, thus the claims as now written appear to encompass options broader than the scope of the original disclosure.

7. The disclosure is objected to because of the following informalities: on further review of the specification, it was noted that further proofreading for nonidiomatic English-language is needed. For instance, note in the much-amended paragraph at the bottom of page 1, that the phrase "making the zones that cause parasitic light rays matt" is nonidiomatic and awkward.

On page 8, towards the middle or bottom of the page, "...made...by injection" or "The mask 23 is obtained by injecting a thermoplastics material..." is disclosed, but teaching "injecting" by itself, i.e. no disclosure of where or how, he is not particularly meaningful. The statement could relate to injecting thermoplastics into something, or injecting something into thermoplastics! Similar disclosures may be found on pages 7, 9, 10,11 & 12. Also on page 10 (3rd paragraph) note the non-idiomatic phrasing "...treatment of the **mould** used to **inject the mask**" (emphasis added), which appears to be the only support, cryptic & questionable as it is, of the new limitation of "injection molding" (however given preceding disclosures of molding such as on pages 3 or 5, it will be considered acceptable support).

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Note any significant amendments, should be provided with clear showing of support from the rituals disclosure.

Appropriate correction is required.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1 & 5-6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Shaffer et al. (5,817,243), as discussed in section 7 of the 12/6/2005 rejection.

With respect to Shaffer et al., applicants argue that "Shaffer's laser etching...*not altering* the light transmission characteristics of the plastic part" (bottom half of page 18, 7/24/2007 response), but then provide a quote from Shaffer (col. 5, lines 1-14) which says "when the part material is plastic... the laser may desirably leave etched areas opaque to enhance the overall decorative contrast of the design...will not adversely affect the transmission of the light beam", which clearly does not mean what applicant asserts, as "not adversely affecting" is an entirely different meaning than the asserted "not altering", with the cited opaque areas clearly being equivalent to the claimed mask for the claims as written. Considering that "mask" is not a term that has any specific known or required meaning with respect to headlights or the like, and applicants' specification (page 6, lines 1-3) includes teachings their "masks" can provide aesthetic effects, so Shaffer's teachings appear to be quite consistent with the claims as written.

For the claims that remain in this rejection, it is again noted that applicants' claims do not require any specific affect, but merely that components that might be used for indicators or lighting devices that emit a beam (which are taught by this reference) must be exposed, with no requirement for there to be any affect what so ever in claims 1-2 from the exposure, especially not any specific affect.

To reiterate, Shaffer et al. teach creating decorative contrast designs on motorcycle and automobile parts, that employ a laser scanning process with pulsed lasers, such as YAG, CO₂ and excimer lasers, where the parts to be treated include molded translucent or transparent plastic substrates that are for automobile or motorcycle light globes and lenses, or mirrored glass, etc. It is taught that parts may be directly etched or plated with metal and then laser ablated to affect taught designs. Note that such designs will have masking effects, and since applicants' masks are not used for anything in particular or connected to the laser process, they do not provide distinction. See the abstract; figure 1; col. 1, line 6-15 & 35-63; col. 2, lines 8-36; col. 3, line 63-col. 4, lines 1-34, 43-53 & 61-67; col. 5, lines 1-14; examples on col. 6-8, especially example 1, 3 & 5.

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Note with respect to claims 2 & 17, applicants' amendment have removed these claims & their dependents from this rejection, due to their narrowing of the scope of these claims.

10. Claims 1 & 6 are rejected under 35 U.S.C. 103(a) as obvious over Pyburn et al. (5,614,338), discussed in section 8 of the 12/6/2005 rejection.

On the bottom of page 19, with their discussion of "*plastics*", where the footnote relates that Pyburn does not disclose any metallization, it is totally irrelevant to the claims rejected with respect to Pyburn, because none of these claims require any metallization, as is clearly evident by applicants needing to compare them to claims which **were not** included in the rejection. Given that on page 20 of their response, applicants have reproduced the cover figure from Pyburn, which is clearly showing what is definitely a mask associated with a light, which is streaming from the "mask" in a pattern ray, i.e. a beam, of flight, and is of a type that is included for use in automobile, thus applicants' arguments clearly demonstrate the validity of this rejection for the claims **as written**, hence if applicants wish to distinguish over Pyburn, they should consider narrowing the scope of the claims, such that they do not encompass, due to their broad language, types of masking structures associated with lights not intended by applicants. Note, as the scope of claims 17-18 have been narrowed by further describing the mask & the specific motor vehicle lighting device it is associated with, claims 17-18 have been removed from this rejection.

As previously written & currently amended, applicants' claim 1 has no **necessary temporal** relationship between forming step & the exposing step, hence applicants' arguments (page 21 of 7/24/07 response) concerning a nonexistent required order are not convincing. Order of listing, confers no necessary order of doing, unless temporal requirements or sufficient antecedent requirements are present. Note the "said component" which links the two steps, is not the claimed mask or reflector *per se*, which is formed on the component at some unspecified time, by some unspecified means (see above 112 rejections).

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With respect to the requirement of the indicating or lighting devices emitting a beam of light, while it is possible that the backlit graphics and illuminated displays of the automobile instrument panels may have features that can be considered to be beams of light at various points on the panel, they do not necessarily do so, but whether the light emitted is a beam or some broader display is a matter of design of the individual panel, hence would've been highly dependent on design choice and the like, with it further noted that Pyburn's figures 2 & 4 can easily be considered to show shaped beams of light. It remains noted that the backlighting patterning form can be considered a type of masking, and applicants' claims 1 & 6 have not distinguished how the masking is employed in the process in a way that distinguishes from this reference.

To reiterate, Pyburn et al. teach making a graphic for a backlit component, such as a button for an illuminated graphic display of an automobile instrument panel, where it is noted that such a device reads on both the claimed indicating and claimed lighting device options for motor vehicles in applicants' claims. Pyburn et al. uses laser irradiation (YAG, CO₂) to produce substantially opaque regions in transparent polymeric material due to reaction of the laser energy with pigment present therein, thus producing a pattern with areas of different optical function. It is also taught that the laser may rough in the surface under some circumstances, which reads on a type of texturing. In Pyburn et al., see the abstract; figures; col. 1, lines 5-20; col. 2, lines 38-67; col. 3, line 61-col. 4, line 68+, especially 20-37 & 62-65 (roughing).

11. Claims 1 & 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai (5,911,317), in view of Pyburn et al. (discussed above in section 10).

The above arguments in section 10 also apply to the maintenance of this rejection. Furthermore applicant's arguments, which appears to assume that one must use the word "mask" in the same way applicants might intend, in order to actually have formed what is a mask, are totally unconvincing. Since applicants' arguments with respect to Pyburn were inconsistent with the claims as written, hence

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unconvincing, arguments which discuss only on Tsai, are also unconvincing, as are those arguments to discount the combination of Pyburn & Tsai, based on previously unconvincing arguments. Note again, that claims 2 & 17-20, which have been narrowed in scope have been removed from this rejection.

To reiterate from section 9 of the 12/6/2005 rejection, Tsai teaches a technique for making a light permeable metal plated rubber key that is taught to be useful in **all kinds of electronic** and telecommunication products. The key has a silicone rubber base with a layer of ink in a desired color and a protective resin layer thereover, which is then vacuum spray **plated with a metal** such as Ni, Cr, Ti, Al, Cu, Sn, Ag or Au, to completely metallize, that is **subsequently laser engraved**, i.e. laser ablated, to display a desired letter, and finally protectively coated. In Tsai, see the abstract; figures; col. 1, line 7-11; col. 2, lines 8-40.

Tsai does not mention the use of their key, i.e. button, in any kind of motor vehicle, however motor vehicles instrument panels are replete with various electronics and controls therefore, hence as such it would have been obvious to one of ordinary skill in the art to use the keys or buttons of Tsai for such electronics in automobiles that require buttons, especially in view of Pyburn et al., who teach and demonstrates the use of backlit buttons in automobile instrument panels, providing further motivation for the above stated obviousness.

12. Claims 2 & 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. as applied to claims 1 & 5-6 above, and further in view of Pope (GB 2,244,934 A) or Ouderkirk et al. (2004/0145289 A1), as discussed in section 11 of the 12/6/2005 rejection.

It was noted that with respect to Ouderkirk et al, applicants' arguments that the French patent application antedates Ouderkirk et al is **not supported by a certified translation**, hence **until** such as is **supplied & verified** as being consistent with the English language application submitted for examination, the **French application cannot be used to remove Ouderkirk et al** as prior art.

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Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

To reiterate, while Shaffer et al. teach laser etching or ablation of either the glass or plastic substrate material, or of metal plated on substrate material for automobile parts, or teach discoloring lenses or globes for automobile lights to create patterns within the substrate, they do not teach "laser embossing", unless by laser embossing applicant actually been laser etching, in which case claimed 3 belongs in the 102 rejection, however embossing in general does not mean taking away of material, as seated beside a dictionary definition.

Ouderkirk et al. teach multilayer reflectors that are placed in front of light sources, that are made of polymeric materials, which may have nonuniform thickness or thickness gradients along its length and/or width that have been produced via thermoforming, embossing, laser embossing, etc., thus have produced textures or are texturing, that are taught to be advantageous as the variation in thickness produced, potentially by laser embossing, reduces an undesirable "halo effect" (figure 13, [0089-93]), which would have been relevant to automobile lights. Therefore, it would have been obvious to one of ordinary skill in the art, given Shaffer et al.'s laser treated globes and lenses that may be textured or patterned, to treat them with the laser embossing as suggested by Ouderkirk et al. to effect a gradient thickness reflective layer in order to reduce halo effects on the automobile lights.

Alternately, Pope teaches embossing holograms possibly by "laser embossing" in plastic substrates, where the hologram may be a reflection hologram, i.e. metallized, hence it would have been obvious to one of ordinary skill in the art given that Shaffer et al. teach the desirability of laser etching or drawing figures into the material of the light globes and lenses of automobiles, to make those figures holographic laser embossed figures due to the desirable and dramatic aesthetic effects as taught for holographic patterns therein. See the abstract; page 1, lines 8-23; page 3, lines 9-16 & 21-page 4, line 6.

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Applicants argue that Pope is nonanalogous, because it is directed to a "dart flight", or more descriptively directed to two-dimensional pictorial information in holographic form, i.e. a decorative pattern, however this is not convincing, because the enduse is not the only reason that a reference or teaching may be analogous art. Any reference that uses lasers to affect patterning of polymeric materials or metal materials has the potential for being analogous art, depending on their teachings & those teachings relevance, and applicants have not explained why the laser technique of Pope should be considered nonanalogous, hence applicants' constrictive view of what constitutes analogous art is not convincing.

13. Claims 1-4 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuku Hideji or Tsai (5,911,317), in view of Pyburn et al (as applied to claims 1, 5-6 above in sections 10-11), and further in view of Weber et al. (2001/0019013 A1), as discussed in section 12 of the 12/6/2005 rejection.

With respect to Shizuku Hideji (JP 2000-176659, Derwent & JPO abstracts + machine translation + formal translation), in the formal translation note paragraph [0001] relates to buttons used for cars, [0002] notes prior art teachings of characters on buttons, etc., trimmed by YAG lasers; [0005] discussions of adherent deposition, then laser trimming to achieve drawings of characters, numerals, marks & patterns, etc., however while the teachings of this Japanese reference provide for making indicator buttons for cars, they do not discuss backlighting use therefore, hence have no suggestion of a emitting light or a beam of light, thus differ from the independent claim 1, however Pyburn et al. as discussed above shows the obviousness of analogous lighting devices emitting what may be a beam of light, although shaped into designs as indicated.

As noted previously in cited Hideji abstract & machine translation, this Japanese reference teaches thermocompression bonding or hot stamping of metal foil onto a plastic or glass substrate base, where the metal is then patterned by laser marking such that the laser evaporates or scatters metal from

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the metal layer in order to draw a character, number, mark, pattern, etc., therein. YAG lasers are taught for use in this patterning process, and enduses include use for buttons in motor vehicles, portable telephones, etc., thus reading on the claimed "indicating" devices for mobile vehicles. Particularly see the two English abstracts and paragraphs [0001], [0005-6].

Neither Hideji or the art of the above-discussed Tsai, either in view of Pyburn, employ laser texturing as claimed, however Weber et al. (abstract; figures; [0019-23], especially [0019] & [0023]) shows that analogous buttons or keys or switches (which can be used to turn on headlights) that are to have symbol displayed on them, may have that symbol textured for a "gripping" surface, where lasers were mentioned as having been employed for icon creation, hence it would have been obvious to one of ordinary skill in the art that any of the symbols as created on buttons/keys from the above rejections could have been additionally distinguished by raising of the area to be patterned via laser texturing, providing a laser capable of interacting with the polymeric material of the button/key was employed, thereafter the succeeding metallizing patterning steps could proceed as taught, since the patterning techniques would have been complementary to each other, providing care was taken in selection of laser wavelengths for the two different techniques or materials to enable the effects, a conventional procedure or consideration which would have been obvious to one of ordinary skill in the art.

Further note that the texturing taught desirable by Weber et al. may or may not coincide with the lighting feature as discussed above, but creation of the texturing before the patterning to create the masking design or before metallizing in order to prevent degradation of the design would have been an obvious order of performing such steps. Further note that while claims 2 & 4 require the metallization to occur after the texturing, there is no requirement that the location of texturing & metallization have any relationship to each other, except that they are both somewhere on the component, thus **as claimed** have no synergic relationship.

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14. Claim 1 & 25 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Arnold et al. (2002/0071940 A1).

Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al.

Claims 5-6, 17, 19-21 & 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al., as applied to claims 1 & 24-25 above, and further in view of Shaffer et al. as discussed above in section 9.

Arnold et al. (abstract; [0011-17, especially [0012, 15 & 17]; [0019-24], especially [0023]; [0035-37]; [0041-45], especially [0044-45]; [0053-58], especially [0056-58] & claims) teach making multilayered shaped articles, where the shaped article may be metallized for EMI shielding, decorative &/or reflective purposes, explicitly teaching the usefulness of their multilayered structures as reflectors for automotive vehicles, and mentioning use for improved reflective surfaces such as in lamp housings, vehicle reflectors or headlights, etc. ([0035]; [0043] & [0053]). Arnold et al. teaches metallization &/or decoration may be done before or after shaping of the film to be metallized & optionally decorated (metallization may be the decoration or decoration may be additional, possibly an additional metal layer). However, Arnold et al. provides reasons relating to the integrity of the film for why it may be beneficial to shape before metallizing or two too complicated designs for decoration after metallization. Note in Arnold et al., the film layers that are metallized can be considered to read on the component as claimed in applicants' claim 1, where the forming of the final completed object is done by injection molding to create the body of the object, with the film/component & its metallized layer(s) attached during the injection molding process. Note that in order to provide the shielding feature to the electrical products (consider to be inclusive of the taught headlights housing & reflectors, where housing is considered a possible meaning of mask), with which Arnold et al.'s multilayered structures are used, it is taught that the metallized layer is grounded with a "ground trace", which may be attached by various methods, inclusive of laser melting or laser heating, that is used to melt or soften a portion of the metal layer that disposed

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over the ground trace ([0024] & [0064]), hence reading on the claimed generic exposing to laser radiation after metallization.

While Arnold et al. teaches reflective surfaces used with headlights, as well as lamp housings & vehicle reflectors explicitly, as well as teaching the possibility of decorative effects employed with their process, they do not teach a particular shape of lamp housing or explicitly that the lamp housing is for headlights, which could be considered to read on the claimed "mask", nor do they teach decorating their headlights via patterning of the reflective metal used on housing or reflector parts. With respect to the taught lamp housings, it would have been obvious to one of ordinary skill in the art to have applied this teaching to the taught reflective parts for headlights, considering the teachings on chrome like finishes for vapor deposited aluminum & vehicle reflectors being listed alongside both lamp housings & headlights, and to thus employ conventional shapes of structures made to hold vehicle headlights or taillights, which would have been required to have an orifice for the headlight lens, in order to be functional.

With respect to employing decoration & designs on vehicle light structures, Shaffer et al. discussed above provides teachings & motivation concerning the desirability of decorating car part structures, including those related to the headlights, and including to do so via metallization that is to be ablated in order to form desired design with transparent & opaque regions, thus it would have been obvious to one of ordinary skill in the art, to employ such decorative techniques on the metallized car parts that are headlight parts, such as reflectors or housing as suggested in Arnold et al., as it is consistent with the primary references suggestion that their technique may also be directed to decorative effects in combination with any of the other effects, especially considering Arnold et al.'s teachings concerning the advisability in many situations of providing the decorative effects after shaping &/or metallization. Note that as decorative effects are optical in nature, they are an optical function, as generically claimed.

Also while particular reflector shapes for headlights are not discussed by Arnold et al., one of ordinary skill in the art would have been expected to employ any known or conventional reflector shape,

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inclusive of the claimed elliptical interface, with the process as suggested by this combination of references. Note with respect to the preamble of claims 17, since as written it has no clear connection with the body of the claim, so the preamble is not considered to give any necessary meaning to the process steps, especially further considering the vagueness of the "reducing..." description.

15. Claims 1 & 24-25 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fischer et al. (6,521,326 B1).

Claims 2, 5-6, 17, 19-21 & 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al., as applied to claims 1 & 24-25 above, and further in view of Shaffer et al. as discussed above in section 9.

Fischer et al. (abstract; col. 11, lines 29-36; col. 14, lines 60-col. 15, lines 65, especially lines 19 & 60-62; col. 16, lines 25-57, especially 35-47; and col. 17, lines 1-10) teach molding compositions taught to be particularly suitable for automobile construction, useful with any molding technique, with injection molding preferred, especially teaching parts that will be exposed to heat, specifically mentioning ones that will have metallization for reflecting surface properties, and further discussing use with various headlamp components, such as housings, frames, retainers & guides. Fischer et al. further teach that their composite structures having good heat stability are preferably applicable to laser inscription, again noting preference for use on exterior & interior motor vehicle parts (col. 17, lines 1-10). As all features of claims 1 & 24-25, may be considered suggested by these disclosures, these claims may be considered completely read on by Fischer et al., however alternately as Fischer et al. do not explicitly say that the laser scribing is employed on the taught headlamp components, it would have been alternately obvious to one of ordinary skill in the art to employ the suggested laser scribing, on the suggested substrates, for such conventional reasons as inscribing serial numbers on the parts or the like. Also while Fischer et al. explicitly teach their process for the reflective parts of headlights, they do not actually call them "headlamp reflectors", however since this is a required & standard part of a headlight & suggested by the

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context of Fischer et al.'s disclosure, it would have been abundantly evident to one of ordinary skill in the art that reflectors were one of the components being discussed. With respect to the claimed "headlamp mask", while Fischer et al. do not use this nonstandard term, which to the examiner's knowledge has no actual meaning in the art, their teachings of headlamp housings, frames, retainers & guides, are all considered to read on possible meanings of applicants claimed "mask" in light of the apparent general context of applicants' specification, hence reading on the term, or alternately making it obvious due to the similarity of probable meanings, as suggested by applicants' figures.

With respect to the taught laser scribing, when considered with respect to the taught metallized headlamp parts, the teachings of Fischer et al. do not indicate whether the laser scribing would have been preformed before or after metallization, however as previously discussed in Shaffer et al. (section 9 above), it has been seen that laser produced designs in plastic can be performed on the plastics itself, hence could have been reasonably before metallization, or can be performed on metal layers deposited on plastic, so as to ablate & produce a design, i.e. suggestive of an inscription, hence it would have been obvious to one of ordinary skill in the art to imply the laser techniques of Shaffer et al. in order to perform the suggested laser inscription processes of Fischer et al. on their taught headlamp components substrates, either before or after metallization, depending on where the desired inscription is to be placed & under what conditions it is intended to be visible.

16. A patent to Reiss et al. (6,017,138), is considered cumulative to the above rejections of Arnold et al. or Fischer et al., either in view of Shaffer et al., as Reiss et al. provides an alternate reason for producing patterning on reflectors for affecting optical functions, such as their teaching of three distinct zones, which may be discontinuous, as well as their teachings concerning shadow zones, which are opaque deposits, the purpose of which is to prevent problems from parasitic light in motor vehicle headlamps. Also Reiss et al., being to the same assignee as the present application, can be considered in its discussion of "masks" to provide further probable meanings for applicants' claimed masks, noting

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that they may be parts with metal surfaces that surround the lamp. See abstract; figures 1-2+; col. 1, lines 5-13 & 34-col. 2, lines 16; col. 4, lines 46-col. 5, line 12+; and col. 9, lines 39-44. Note if limitations concerning parasitic light rays had been (or are in future) clearly & necessarily required in the claims, this reference would have provided a motivation for employing the laser patterning of the above combinations in order to effect reflective properties of taught headlamp components, so as to avoid parasitic light problems.

Frazier (6,012,830: col. 1-2) & English et al. (5,997,162: col. 1, lines 27-40 & col. 3, lines 57-col. 4, line 12) provide further teachings concerning headlights and the need to eliminate parasitic light in the reflector enclosure containing the lightbulb, or English et al. mentions design considerations with respect to the parasitic light & includes teachings concerning any vehicle headlamp systems needing at least two modes, low beams & high beams; while Frazier is directed towards teachings concerning reflective internal surfaces of the housing & employing a shield with a roughened surface to eliminate the occurrence of parasitic reflections. Robertson (6,188,706 B1) provides further teaching on a light source (a laser beam) which requires parasitic light & it's effects to be removed or reduced for proper function, which reduction is taught be produced by roughing surfaces in appropriate patterns or areas (col. 2 & col. 4, lines 27-41); and Howell (6,885,767 B1: col. 5, lines 1-13) indicate parasitic light is eliminated by trapping, as with black bodies or low albedo (reflectance).

17. Claims 3-4, 18, 22 & 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al., in view of Shaffer et al. as applied to claims 1-2, 5-6, 17, 19-21 & 26-27 & 24-27 above, and further Reiss et al. and Lamprecht et al. (4,954,422).

While the combination of Fischer et al. & Shaffer et al. provides teachings concerning laser scribing in general including by metal of elation & laser treating the plastic substrate for patterning effects, it does not provide a teaching of actually texturing the plastic substrate nor creating a mat effect via such texturing (whether or not metal is actually ever deposited on the texturized portion, which is only

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required in the claim 28 sequence), however Reiss et al. as discussed in section 16 above provides motivation for providing opaque or nonreflecting (i.e. equivalent to dull or mat) patterning on metal parts of headlamps, particularly particular sections of the reflector &/or metal frame (called masks), where Lamprecht et al. (column 1, lines 47-52) in its background provides a teaching on a known laser technique for reducing reflectance by laser texturized a plastic substrate and having a metal layer then applied via vapor deposition, which would provide an alternative laser scribing technique that may be used for the teaching thereof in Fischer et al., especially in view of Shaffer et al.'s teachings with respect to analogous plastic substrates, to provide an alternative means of patterning the plastic consistent with their combined processing procedures & motivated by Reiss et al., which would reasonably have been expected to provide the type of surface taught as required by Reiss et al., in order to prevent parasitic reflections, as its use would reduce the reflectance of light by the applied metal at desired surface locations as would have been suggested to one of ordinary skill in the art by teachings of Reiss et al. to thus eliminate the parasitic reflection.

18. Applicant's arguments filed 7/24/2007 and discussed above have been fully considered but they are not persuasive.

With respect to applicant comments on pages 15-16 of the response, that appear to be directed to the contradictory paragraphs on lines 12-19 of page 3, their discussion provides a reasonable explanation for the record of what was as discussed intended to be 2 different processing options.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on M-F from about 8:30 a.m. to 4:30 p.m.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks, can be reached at (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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MLP/dictation software

9/25-27/2007



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